| Notice of Allowability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Application No.                                              | Applicant(s)            |       |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------|-------|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 10/796,657                                                   | DYKSTRA ET AL.          |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Examiner                                                     | Art Unit                |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Nyeemah Grazier                                              | 1626                    |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Nyeeman Graziei                                              | 1020                    |       |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |                                                              |                         |       |  |
| 1. X This communication is responsive to <u>9/25/06</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                              |                         |       |  |
| 2. X The allowed claim(s) is/are <u>1-25, 53-60, 78-84 (renumbered as 1-40)</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                              |                         |       |  |
| 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some* c) ☐ None of the:                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                              |                         |       |  |
| 1. Certified copies of the priority documents have been received.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                              |                         |       |  |
| 2. Certified copies of the priority documents have been received in Application No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                              |                         |       |  |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              |                         |       |  |
| International Bureau (PCT Rule 17.2(a)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                              |                         |       |  |
| * Certified copies not received:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                              |                         |       |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.                                                                                                                                                                                                                                                                                                                 |                                                              |                         |       |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.                                                                                                                                                                                                                                                                                                                                                           |                                                              |                         |       |  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                              |                         |       |  |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              |                         |       |  |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              |                         |       |  |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                              |                         |       |  |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).                                                                                                                                                                                                                                                                                                                            |                                                              |                         |       |  |
| <ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the<br/>attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>                                                                                                                                                                                                                                                                                                                                                       |                                                              |                         |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                              |                         |       |  |
| AMach man4/a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                              |                         |       |  |
| Attachment(s) 1. ⊠ Notice of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5. Notice of Informal P                                      | atent Application       |       |  |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <ol> <li>Interview Summary<br/>Paper No./Mail Dat</li> </ol> |                         |       |  |
| <ol> <li>Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date 1/23/06, 6/22/06</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7. 🛭 Examiner's Amendn                                       |                         |       |  |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8.   Examiner's Statement                                    | ent of Reasons for Allo | wance |  |
| C. Breitegreut muterius                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 9. ☑ Other <u>Drawings - 3/</u>                              | <u>9/04</u> .           |       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                              |                         |       |  |
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# **DETAILED ACTION**NOTICE OF ALLOWANCE

#### I. ACTION SUMMARY

The Amendments to the Claims and Remarks submitted to the Office on September 25, 2006 have been fully considered and will be the basis of the following Notice of Allowance.

Claims 1-25, 53-60 and 78-84 are currently pending and are in condition for allowance. Claims 1-13, 18-21, and 22-25, Groups I, III and IV respectively have been rejoined and fully examined. Claims 53-59, 60, 78-83, and 84; Groups VII, VIII, X, and XI previously withdrawn, have been rejoined and fully examined for patentability pursuant to M.P.E.P. § 821.04(b).

## II. INFORMATION DISCLOSURE STATEMENT

The supplemental information disclosure statements filed on January 23, 2006 and June 22, 2006 have been fully considered by the Examiner.

## III. RESPONSE TO AMENDMENTS

## A. Double Patenting Rejection

Applicant's argument, see Remarks, filed June 28, 2006, with respect to the double patenting rejection asserted in Section IV. of the Remarks have been fully considered and are persuasive because the Applicant has elected subject matter in recent election and restriction requirement in the co-pending application (11/262,427) that is independent and distinct. Thus, the double patenting rejection of claims 107-113 has been obviated.

# B. Obviousness-Type Double Patenting Rejections

Applicant's arguments, see Remarks, filed June 28, 2006, with respect to the obviousness-type double patenting rejection asserted in Section V. of the Remarks have been fully considered and are persuasive because the Applicant has amended instant claims 1 and 14 such that R1-R4 no longer include amidine. The rejection of claims 1, 2, 4, 11, 14, and 15. The rejection has been obviated.

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# C. Provisional Obviousness-Type Double Patenting Rejection

Applicant's arguments, see Remarks, filed June 28, 2006, with respect to the provisional obviousness-type double patenting rejection asserted in Section VI. of the Remarks have been fully considered and are persuasive because the Applicant has amended instant claims 1 and 14 such that R1-R4 no longer include amidine. The rejection of claims 1, 2, 4, 11, 14, and 15. The rejection has been obviated.

# D. Objections

Applicant's arguments, see Remarks, filed June 28, 2006, with respect to the claims objections asserted in Section VII. Of the Remarks have been fully considered and are persuasive in light of the Amendments to the Claims. The objections have been obviated.

## IV. EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the Specification on page 1, ¶ [0003], DELETE "The present application" and INSERT --- The application is a Continuation of United States Non-provisional Application No. 10/044,315, filed on January 11, 2002, now abandoned, which --- before "claims priority to United States Provisional Application No. 60/261,654,".

## V. REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The instant invention is drawn to furanyl benzimidazole and furanyl phenyl benzimidazole compounds useful in treating bovine viral diarrhea virus and pestivirus related hepatitis C viral infections. The instant invention appears to be free of the art of record. The closest prior art reference of record is Del *Poeta et al.*, "In Vitro Antifungal Activities of a Series of Dication-Substituted Carbazoles, Furans, and Benzimidazoles" **Antimicrobial Agents and Chemotherapy**, vol. 42(10), 2503-

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2510 1998. *Del Poeta et al.* teaches di-aryl furans having antimicrobial activity. The instant invention is not anticipated nor rendered obvious by the teachings of the *Del Poeta*, *et al.* reference because in the instant invention the aryl and benzimidazolyl groups do not simultaneously have amidine substitutions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## VI. CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nyeemah Grazier whose telephone number is (571) 272-8781. The examiner can normally be reached on Monday through Thursday and every other Friday from 8:30 a.m. - 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. M<sup>c</sup>Kane, can be reached on (571) 272 - 0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Very truly yours,

Nyeemah Grazier, Esq.
Patent Examiner, Art Upit 1626

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